

REMARKS

Claims 1 and 8 have been amended. Claims 1, 4, 6-8 and 11-16 are pending and under consideration. Proper support for the amendment to claim 8 can be found in the specification, at least at paragraphs [0037] and [0038]. No new matter is presented in this Amendment.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 1, 4, 6-7, and 16 are rejected under 35 U.S.C. §103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of Park et al., (U.S. Publication 2004/0032385).

Applicants respectfully traverse this rejection for at least the following reasons.

Regarding the rejection of independent claim 1, it is noted that claim 1 recites a **field-sequential liquid crystal display panel** comprising, amongst other novel features, **storage capacitors provided between each of the cell electrodes and a corresponding one of the scan electrode lines**, to sustain voltages applied to the cell electrodes of the field-sequential liquid crystal display panel.

The Office Action recognizes that AAPA fails to teach or suggest that the storage capacitors are provided between the cell electrodes and corresponding one of the scan electrode lines and relies on Park for such teaching.

In particular the Office Action notes that Park discloses a liquid crystal display panel having a pixel electrode, scan electrode lines (G_{1n}, G_{1n-1}) and storage capacitors (C_{st}) formed between the cell electrode and the **previous** scan electrode line (paragraph [0011] and Fig. 3). Contrary to Park, the storage capacitor recited in independent claim 1 is formed between a cell electrode and a corresponding scan electrode line. In other words, the storage capacitor and the gate of the thin film transistor are coupled to the **same** scan electrode line. Accordingly, Park fails to cure the deficiencies of AAPA.

Furthermore, Applicants respectfully note that Park relates to a **color-filter** liquid crystal display panel while AAPA relates to a **field-sequential** liquid display. As noted in the specification of the instant application and in particular in paragraph [0009], the color-filter liquid crystal display and the field-sequential liquid crystal display differ in various aspects including

scanning speeds and voltage sustaining times. Therefore, Applicants respectfully submit that the references relate to different subject matter. As a result, there is no motivation to modify the teachings of Park with the teachings of AAPA to teach the aspects of the present invention, and only through hindsight would one be motivated to modify the references. Furthermore, even if the references would be combinable, the references still fail to teach or suggest all of the novel aspects of independent claim 1.

Accordingly, Applicants respectfully assert that the rejection of claim 1 under 35 U.S.C. § 103(a) should be withdrawn because neither AAPA nor Park, whether taken singly or combined, teach or suggest each feature of independent claim 1.

Additionally, Applicants respectfully assert that the rejection of dependent claims 4, 6 and 7 under 35 U.S.C. §103(a) should be withdrawn at least because of their dependence from claim 1 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 4, 6 and 7 also distinguish over the prior art.

Regarding the rejection of independent claim 16, it is noted that claim 16 recites a field-sequential liquid crystal display panel having a plurality of cell regions, each cell region comprising: a thin film transistor, comprising a drain, a source, and a gate; a cell electrode coupled to the drain or source of the thin film transistor; a scan electrode line coupled to the gate of the thin film transistor; a data electrode line coupled to the source or drain of the thin film transistor; and a storage capacitor provided **between the cell electrode and the scan electrode line of an adjacent cell region.**

As noted above, the Office Action recognizes that AAPA fails to teach or suggest that the storage capacitors are provided between the cell electrodes and corresponding one of the scan electrode lines and relies on Park for such teaching. The Office Action further states that it would have been obvious to one of ordinary skill in the art to modify the display of AAPA by placing the storage capacitors between the cell electrodes and respective, adjacent, or corresponding scan electrode lines to implement gray levels. Applicants respectfully disagree with such characterization for at least the following reason. Any change to the location of the storage capacitor in the circuit has a significant effect on the capacitances of the storage capacitor. Therefore, such modification would not only affect the implementation of gray levels

but would also affect the capacitance. Since Park discloses a capacitor in a **color-filter** liquid crystal display panel which requires greater capacitance to sustain the voltage, it would not be advisable to couple the charge capacitor to an adjacent cell region for this would prevent the capacitor from sustaining the necessary voltage (paragraph [0038] of the specification). Therefore, Park fails to provide any motivation or suggestion to couple the capacitor to an adjacent cell region.

Accordingly, Applicants respectfully assert that the rejection of claim 16 under 35 U.S.C. § 103(a) should be withdrawn because neither AAPA nor Park, whether taken singly or combined, teach or suggest each feature of independent claim 16.

Claims 8 and 11-15 are rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Park as applied above, and further in view of Takemura (U.S. Patent 5,852,488).

Applicants respectfully traverse this rejection for at least the following reasons.

Regarding the rejection of independent claim 8, it is noted that claim 8, as amended, recites a field-sequential liquid crystal display panel, comprising: thin film transistors, each comprising a drain, a source, and a gate; cell electrodes coupled to the drains or sources of the thin film transistors; scan electrode lines coupled to the gates of the thin film transistors; and storage capacitors to sustain a voltage applied to the cell electrodes; wherein each of the **storage capacitors** is provided **between** one of the **cell electrodes** and **below** a **scan electrode line** coupled to the gate of a respective one of the thin film transistors.

The Office Action recognizes that neither AAPA nor Park disclose a display wherein storage capacitors are provided between one of the cell electrodes and a scan electrode line coupled to the respective one cell through one of the thin film transistors. Therefore, the Office Action relies on Takemura (FIG. 1D) for such teachings.

Takemura discloses capacitors C₁ and C₂ each connected to a different gate line since it is necessary that the gate line be supplied with a bipolar pulse (column 5, lines 30-36). In other words, Takemura requires a common electrode line in order to provide the different pulses. Contrary to Takemura independent claim 8 recites **storage capacitors** provided **between** one of the **cell electrodes** and **below** a **scan electrode line** coupled to the gate of a respective one

of the thin film transistors, eliminating the need for a common electrode line.

Therefore, Takemura also fails to teach or suggest the novel features of independent claim 8.

Accordingly, Applicants respectfully assert that the rejection of claim 8 under 35 U.S.C. § 103(a) should be withdrawn because neither AAPA nor Park nor Takemura, whether taken singly or combined, teach or suggest each feature of independent claim 8.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 11-15 under 35 U.S.C. §103(a) should be withdrawn at least because of their dependence from claim 8 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 11-15 also distinguish over the prior art.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

Date: 1/9/07

By: Douglas X. Rodriguez
Douglas X. Rodriguez
Registration No. 47,269

1400 Eye St., NW
Suite 300
Washington, D.C. 20005
Telephone: (202) 216-9505
Facsimile: (202) 216-9510